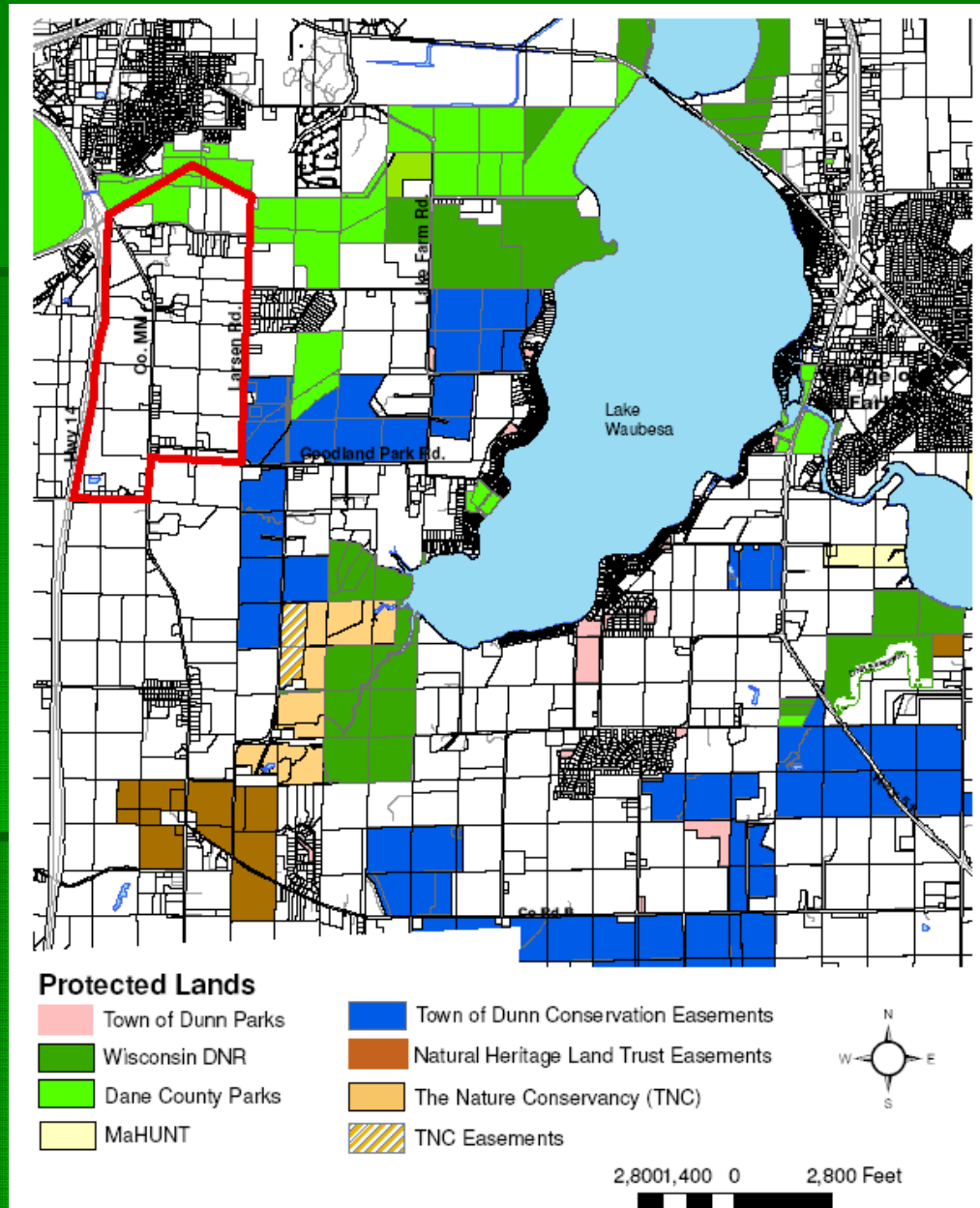


# Town of Dunn Report on proposed Northeast Neighborhood

# Regional Pattern of Land Protection



# Regional Stewardship

## Investments in Land Protection:

- Wisconsin DNR

- Capital Springs Centennial State Park - 3,000 acres

- existing high quality plant communities
    - wildlife habitat
    - regional recreational resource

(Capital Springs Centennial State Park and Recreation Area Master Plan, 8/2003)

- South Waubesa Wetlands State Natural Area

- designated a State Natural Area in 1974
    - “one of the highest quality and most diverse wetlands remaining in southern Wisconsin”
    - 9 major springs and numerous smaller ones provide the wetland with an abundance of high quality water
    - “the extensive wetlands and high quality of the water contribute significantly to the water quality of Lake Waubesa”

(<http://dnr.wi.gov/org/land/er/sna/sna114.htm>)

# Regional Stewardship

- Dane County

- Lake Farm Park

- Nine Springs E-Way – implementing since 1970's

“linear, continuous network of natural and developed features that focus on educational, ecological, esthetical, and environmental values”

(Lewis, P.H., Jr. 1996. Tomorrow by Design. NY, NY: John Wiley & Sons, Inc.)

- American Farmland Trust

- Protect prime and productive farmland

# Regional Stewardship

- The Nature Conservancy

- a "living museum" of native plant and animal communities
- habitat for many species of waterfowl and other migrating birds

(<http://www.nature.org/wherewework/northamerica/states/wisconsin/preserves/art21.html>)

- US Department of Agriculture

- keep productive farm and ranchland in agricultural uses

# Regional Stewardship

- Natural Heritage Land Trust

- protects natural areas, wildlife habitat, working farms, healthy lakes and streams, and recreation land

(<http://www.nhlt.org/aboutus.php>)

- Town of Dunn

- preserve farmland and farm operations
- protect open space and environmentally sensitive areas
- stewardship

# Regional Stewardship

## **Investment:**

- 3<sup>rd</sup> Street Wetland: restoration, retention ponds
- Esch Marsh: restoration
- Dunn Heritage Park: purchase and retention ponds
- Libby Landfill legal fight: prevented leachate
- MMSD Badfish Creek diversion
- Aaberg/Dane Co. legal fight: prevented bridge and subdivision across Swan Creek



# Surface Water Concerns

**Initial Concern** – flooding of Meadowview

## **Private systems:**

- perception of mosquito breeding grounds, dangerous for children, long grass associated with ticks, public will not embrace proper maintenance
- lack of political will to monitor and enforcement systems



# Surface Water

**No confidence** that you can engineer solutions in this sensitive area.

Storm water will have increased contaminants and degrade Swan and Murphy Creeks and Lake Waubesa

# Surface Water

- “For the Great Lakes region, the proportion of precip. falling in extreme events has increase over the last 100 years” and is expected to increase even more.

John Magnuson UW-Madison emeritus professor (Cap Times

June 18-24, 2008)

# Surface Water

## **Recommendation:**

- Limit development to basins 2, 4, 5, 6
- Require public storm water systems
- Performance standard: no net addition of phosphorous
- Require models reflect changing weather patterns

# Ground Water

- **Concerns:**

- **Increased pumping will impact the shallow wells and springs.** (Dr. Cal DeWitt's research)
- Reduced gw recharge will **degrade** lower lobe of Lake Waubesa
- **Increased gw recharge will raise the water table.** Meadowview is mostly on Sable soils (SaA) with a seasonal high water table.

# Ground Water



# Ground Water

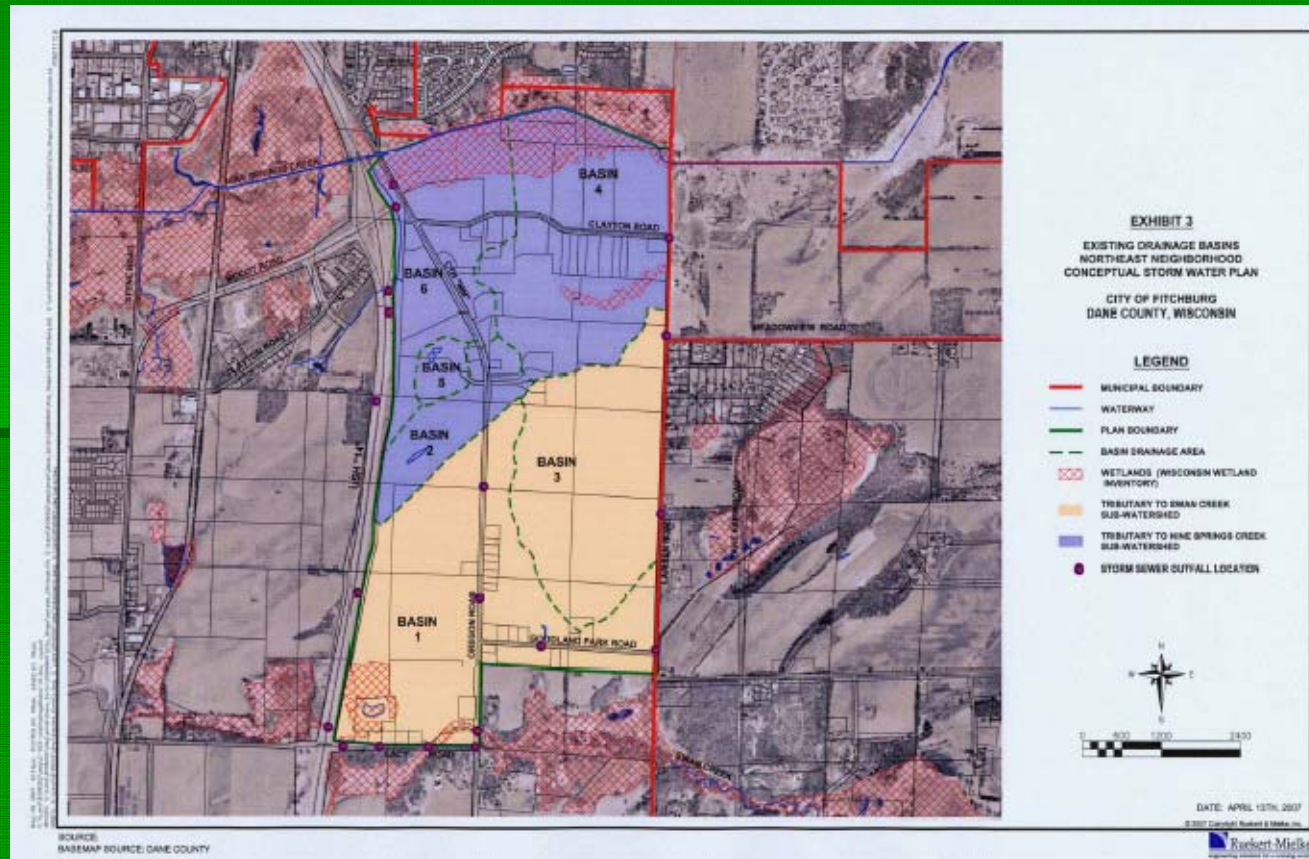
## **Recommendation:**

- No net change in gw recharge (increase or decrease)
- No increase in pumping in area without aquitard



# Community Separation

- Transition area to development: limit development in basins 1 and 3.





# Recommendations (cont.)

- Boundary agreement with Dunn and Madison

# Benefits

- Creates transition area to protected lands
- Visual community separation
- Protects surface water flow to Swan and Murphy Creeks
- Secure long term planning
- Protects GW system that we are just starting to understand
- Stewardship of Regional Resources